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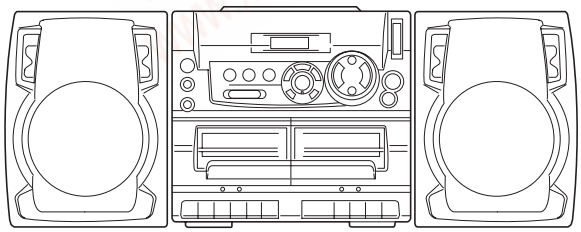
aiwa SERVICE

CA-DW247 U(S)
CA-DW257 LH(S)



SERVICE MANUAL

COMPACT DISC CARRY COMPONENT SYSTEM

BASIC TAPE MECHANISM : ZZM-2 YPR3NF
BASIC CD MECHANISM : DA11T3C

This Service Manual is the “Revision Publishing” and replaces “Simple Manual”
CA-DW247 U<S>,U2<S> (S/M Code No.09-003-339-4T1)
CA-DW257 LH<S> (S/M Code No.09-003-339-4T2).

aiwa

S/M Code No. 09-003-339-4R1

REVISION DATA

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SPECIFICATIONS

Tuner section
Frequency range, antenna — FM: 87.5 - 108.0 MHz Rod antenna, AM: 530 - 1,710 kHz Ferrite bar antenna

Deck section
Track format — 4 tracks, 2 channels / Frequency range — Normal tape: 50 - 12,000 Hz (EIAJ) / Recording system — AC bias / Erasing system — Magnet erase / Heads — Deck 1: Recording/playback head (1), Erasure head (1); Deck 2: Playback head (1)

CD player section
Disc — Compact disc / Scanning method — Non-contact optical scanner (semiconductor laser) / Rotation speed — Approx. 500 - 200 rpm/CLV / Error correction — Cross interleave, Reed, Solomon code / Number of channels — 2 channels / D/A conversion — 1 bit DAC

General (257 MODEL)
Power requirements — DC 12 V using eight size D (R20) batteries, AC 110 - 120 V/220 - 240 V switchable, 50/60 Hz / Dimensions (W × H × D) — 260 × 247 × 260 mm / Weight — 3.3 kg (excluding batteries)
Power output — 4.5 W + 4.5 W (3.2 ohms, EIAJ), 3.3 W + 3.3 W (DIN 1% Rated Power) / Power consumption — 27 W

General (247 MODEL)
Power requirements — DC 12 V using eight size D (R20) batteries, AC 120 V, 60 Hz / Dimensions (W × H × D) — 260 × 247 × 260 mm ($10^1/_4$ × $9^3/_4$ × $10^1/_4$ in.) / Weight — 3.3 kg (7 lb 4 oz.) (excluding batteries)
Power output — 2.5 W + 2.5 W (7 ohms, EIAJ) / Power consumption — 18 W

Speaker(257 MODEL)
Type — 120 mm cone type / Dimensions (W × H × D) — 184 × 235 × 240 mm / Weight — Approx. 1.3 kg × 2
Impedance — 3.2 ohms / Allowable max. input — 7.0 W

Speaker(247 MODEL)
Type — 120 mm cone type / Dimensions (W × H × D) — 184 × 235 × 240 mm ($7^1/_4$ × $9^3/_8$ × $9^1/_2$ in.) / Weight — Approx. 1.3 kg (2 lb 14 oz.) × 2
Impedance — 7 ohms / Allowable max. input — 5 W

- Design and specifications are subject to change without notice.

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO		PART NO.	KANRI NO.	DESCRIPTION
	1	8A-CT9-902-010		IB,LH(ESP)FM<257 LH<S>>
	1	8A-CT9-903-010		IB,U(ESF)FM<EXCEPT 257 LH<S>>
⚠	2	87-A90-312-010		PLUG,CONVERSION WTN-1157R1 <257 LH<S>>
⚠	3	87-A80-036-010		AC CORD SET ASSY,E W/FLTR VOL <257 LH<S>>
⚠	3	87-A80-109-010		AC CORD,HK7281 BLK U <EXCEPT 257 LH<S>>
	4	8Z-CDK-962-010		RC UNIT,RC-ZAT02(VS)

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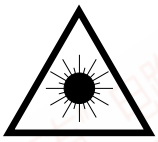
PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

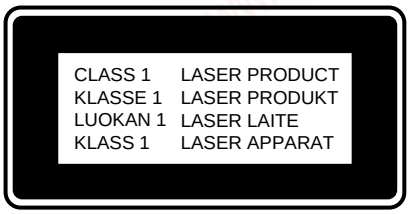
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

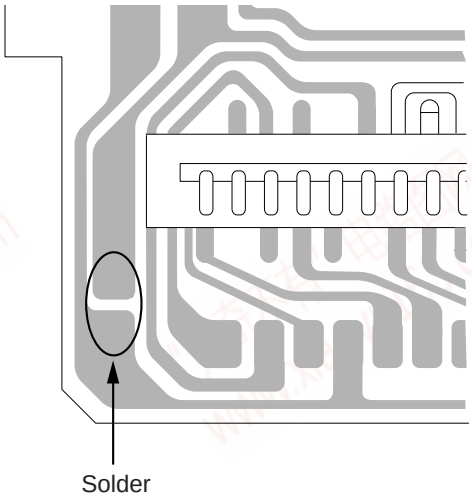


Precaution to replace Optical block (SF-P101NR)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



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ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-955-010		IC,LA1828
	87-A21-090-010		IC,LA4600
	87-A21-520-040		C-IC,M61509FP
	87-020-828-010		IC,BA3416BL
	87-001-440-010		IC,BA15218N
	87-A20-446-010		C-IC,LA9241ML
	87-A20-459-010		C-IC,LC78622ED
	87-A21-093-010		IC,LA6541D
	8A-CH4-661-010		C-IC,LC867132V-5P07
	87-A20-914-010		IC,SPS-442-1-F
TRANSISTOR			
	89-327-143-080		TR,2SC2714 (0.1W)
	87-026-447-080		TR,2SC1740S R
	87-026-463-080		TR,2SA933S (0.3W)
	87-026-213-080		CHIP-TR,DTC114YK
	89-318-154-080		TR,2SC1815 (0.4W)
	89-320-011-080		TR,2SC2001 (15W)
	87-026-462-080		TR,2SC1740 S RS (0.3W)
	87-026-291-080		TR,DTC124XS
	89-109-332-380		TR,2SA933RS
	89-113-187-080		TR,2SA1318TU
	87-A30-287-040		CHIP TR DTC114TKA T146
	87-A30-435-040		CHIP TR DTC144EKA T146
	89-112-965-080		TR,2SA1296 (0.75W)
	87-A30-226-010		TR,2SB1655E
	87-026-291-010		TR,DTC124XS
	87-026-463-010		TR,2SA933S,RS
	87-026-464-010		TR,DTC114TS
	87-026-610-080		TR,KTC3198GR
	89-322-405-080		TR,2SC2240GR
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-128-080		C-VARI-CAP,HVU202A
	87-027-703-080		ZENER,HZ7A1L<257 LH<S>>
	87-027-399-080		ZENER,HZ7A3L<EXCEPT 257 LH<S>>
	87-A40-466-080		ZENER,MTZJ2.7A
	87-070-345-080		DIODE,IN4148
	87-A40-648-080		ZENER,MTZJ8.2A
	87-027-702-080		ZENER,HZ6C2L
	84-RM1-695-010		DIODE,1N4148
	87-A40-465-010		DIODE,FR202
MAIN C.B			
C1	87-010-314-080		C-CAP,S 22P-50V
C2	87-010-316-080		C-CAP,S 33P-50 CH
C3	87-010-314-080		C-CAP,S 22P-50V
C4	87-010-148-080		CHIP CAP S 4P/50V(C) CH
C5	87-010-378-080		CAP, ELECT 10-16V
C7	87-012-156-080		C-CAP,S 220P-50 CH
C8	87-010-197-080		CAP, CHIP 0.01 DM
C9	87-010-311-080		CAP 12P
C10	87-010-197-080		CAP, CHIP 0.01 DM
C11	87-010-152-080		CHIP.CAP,S 8P/50V(D)CH
C12	87-010-314-080		C-CAP,S 22P-50V
C13	87-010-148-080		CHIP CAP S 4P/50V(C) CH
C14	87-016-669-080		C-CAP,S 0.1-25 K B
C15	87-016-669-080		C-CAP,S 0.1-25 K B
C16	87-010-178-080		CHIP CAP 1000P
C17	87-016-669-080		C-CAP,S 0.1-25 K B
C18	87-010-197-080		CAP, CHIP 0.01 DM
C19	87-016-669-080		C-CAP,S 0.1-25 K B
C20	87-010-400-080		CAP, ELECT 0.47-50V
C21	87-010-403-080		CAP, ELECT 3.3-50V
C22	87-010-197-080		CAP, CHIP 0.01 DM
C24	87-010-426-080		CHIP.CAP,S 0.012U/50V(Z)
C25	87-010-426-080		CHIP.CAP,S 0.012U/50V(Z)
C26	87-A11-729-080		CHIP CA 0.47UF/25V(Z)F
C27	87-A11-729-080		CHIP CA 0.47UF/25V(Z)F
C28	87-010-992-080		C-CAP,S 0.047-25 B
C29	87-010-992-080		C-CAP,S 0.047-25 B
C30	87-010-248-080		CAP, ELECT 220-10V
C31	87-010-379-080		CAP, ELECT 22-16V
C32	87-010-197-080		CAP, CHIP 0.01 DM
C33	87-010-197-080		CAP, CHIP 0.01 DM
C34	87-010-197-080		CAP, CHIP 0.01 DM
C35	87-010-197-080		CAP, CHIP 0.01 DM
C36	87-010-263-080		CAP, ELECT 100-10V
C38	87-010-322-080		C-CAP,S 100P-50 CH
C39	87-010-197-080		CAP, CHIP 0.01 DM
C39	87-010-197-080		CAP, CHIP 0.01 DM
C51	87-010-197-080		CAP, CHIP 0.01 DM
C56	87-010-148-080		CHIP CAP S 4P/50V(C) CH
C91	87-010-197-080		CAP, CHIP 0.01 DM
C92	87-010-197-080		CAP, CHIP 0.01 DM
C212	87-010-805-080		CHIP.CAP,S 1U-16V(Z)F
C212	87-010-805-080		CHIP.CAP,S 1U-16V(Z)F
C215	87-016-460-080		C-CAP,S 0.22-16 B
C216	87-016-460-080		C-CAP,S 0.22-16 B
C231	87-015-632-080		C-CAP,0.015-50 B
C232	87-015-632-080		C-CAP,0.015-50 B
C233	87-A10-201-080		C-CAP,S0.33-16 KB
C234	87-A10-201-080		C-CAP,S0.33-16 KB
C235	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C236	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C237	87-010-221-080		CAP, ELECT 470-10V
C238	87-010-248-080		CAP, ELECT 220-10V
C239	87-010-197-080		CAP, CHIP 0.01 DM
C240	87-010-197-080		CAP, CHIP 0.01 DM
C241	87-010-401-080		CAP, ELECT 1-50V
C242	87-010-401-080		CAP, ELECT 1-50V
C243	87-010-401-080		CAP, ELECT 1-50V
C244	87-010-401-080		CAP, ELECT 1-50V
C245	87-010-401-080		CAP, ELECT 1-50V
C246	87-010-401-080		CAP, ELECT 1-50V
C247	87-010-401-080		CAP, ELECT 1-50V
C248	87-010-401-080		CAP, ELECT 1-50V
C251	87-010-404-080		CAP, ELECT 4.7-50V
C261	87-010-402-080		CAP, ELECT 2.2-50V
C262	87-010-402-080		CAP, ELECT 2.2-50V
C263	87-010-178-080		CHIP CAP 1000P
C265	87-010-404-080		CAP, ELECT 4.7-50V
C266	87-010-545-080		CAP, ELECT 0.22-50V
C267	87-010-545-080		CAP, ELECT 0.22-50V
C271	87-010-237-080		CAP, ELECT 1000-16V<257 LH<S>>
C271	87-010-221-080		CAP, ELECT 470-10V<EXCEPT 257 LH <S>>
C272	87-010-237-080		CAP, ELECT 1000-16V<257 LH<S>>
C272	87-010-221-080		CAP, ELECT 470-10V<EXCEPT 257 LH <S>>
C277	87-010-404-080		CAP, ELECT 4.7-50V
C278	87-010-263-080		CAP, ELECT 100-10V
C279	87-010-263-080		CAP, ELECT 100-10V
C280	87-010-178-080		CHIP CAP 1000P
C281	87-010-178-080		CHIP CAP 1000P
C285	87-010-178-080		CHIP CAP 1000P
C287	87-010-178-080		CHIP CAP 1000P
C288	87-010-178-080		CHIP CAP 1000P
C291	87-010-404-080		CAP, ELECT 4.7-50V
C293	87-010-404-080		CAP, ELECT 4.7-50V
C301	87-010-306-080		CHIP CAP 560P/50V (J) CH
C302	87-010-306-080		CHIP CAP 560P/50V (J) CH
C303	87-010-177-080		C-CAP,S 820P-50 SL
C304	87-010-177-080		C-CAP,S 820P-50 SL

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C305	87-010-260-080		CAP, ELECT 47-25V
C306	87-010-260-080		CAP, ELECT 47-25V
C307	87-010-382-080		CAP, ELECT 22-25V
C308	87-010-405-080		CAP, ELECT 10-50V
C309	87-010-545-080		CAP, ELECT 0.22-50V
C310	87-010-545-080		CAP, ELECT 0.22-50V
C311	87-010-248-080		CAP, ELECT 220-10V
C312	87-010-260-080		CAP, ELECT 47-25V
C313	87-015-828-080		C-CAP,0.033 F
C314	87-015-828-080		C-CAP,0.033 F
C315	87-010-401-080		CAP, ELECT 1-50V
C316	87-010-401-080		CAP, ELECT 1-50V
C317	87-010-382-080		CAP, ELECT 22-25V
C318	87-010-382-080		CAP, ELECT 22-25V
C319	87-010-405-080		CAP, ELECT 10-50V
C320	87-010-405-080		CAP, ELECT 10-50V
C321	87-012-157-080		C-CAP,S 330P-50 CH
C322	87-012-157-080		C-CAP,S 330P-50 CH
C323	87-010-197-080		CAP, CHIP 0.01 DM
C324	87-010-197-080		CAP, CHIP 0.01 DM
C325	87-010-180-080		C-CER 1500P
C326	87-010-180-080		C-CER 1500P
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-178-080		CHIP CAP 1000P
C329	87-018-132-080		CAP,CER 2200P-16V
C330	87-010-213-080		C-CAP,S 0.015-50 B
C331	87-010-260-080		CAP, ELECT 47-25V
C332	87-A10-321-080		MALAY CAP 0.0012UF/50V(K)
C334	87-012-155-080		C-CAP 180P-50CH
C335	87-010-178-080		CHIP CAP 1000P
C341	87-012-157-080		C-CAP,S 330P-50 CH
C342	87-012-157-080		C-CAP,S 330P-50 CH
C343	87-012-157-080		C-CAP,S 330P-50 CH
C344	87-012-157-080		C-CAP,S 330P-50 CH
C350	87-010-197-080		CAP, CHIP 0.01 DM
C401	87-010-403-080		CAP, ELECT 3.3-50V
C402	87-010-197-080		CAP, CHIP 0.01 DM
C403	87-010-263-080		CAP, ELECT 100-10V
C404	87-010-248-080		CAP, ELECT 220-10V
C405	87-010-197-080		CAP, CHIP 0.01 DM
C406	87-010-374-080		CAP, ELECT 47-10V
C407	87-010-178-080		CHIP CAP 1000P
C408	87-010-198-080		CAP, CHIP 0.022
C409	87-010-248-080		CAP, ELECT 220-10V
C410	87-010-263-080		CAP, ELECT 100-10V
C411	87-A11-177-080		C-CAP,S 0.15-16 K B
C412	87-010-401-080		CAP, ELECT 1-50V
C413	87-016-369-080		C-CAP,S 0.033-25 B K
C414	87-010-405-080		CAP, ELECT 10-50V
C416	87-010-545-080		CAP, ELECT 0.22-50V
C417	87-012-157-080		C-CAP,S 330P-50 CH
C418	87-010-213-080		C-CAP,S 0.015-50 B
C419	87-A11-608-080		C-CAP,S 0.33-25 K B
C420	87-016-369-080		C-CAP,S 0.033-25 B K
C421	87-A11-177-080		C-CAP,S 0.15-16 K B
C422	87-010-184-080		CHIP CAPACITOR 3300P(K)
C423	87-A10-321-080		CHIP.CAP,S 0.047U/25V(Z)F
C424	87-A10-712-080		CHIP.CAP,S 0.22U/50V
C425	87-010-176-080		C-CAP,S 680P-50 SL
C426	87-A11-608-080		C-CAP,S 0.33-25 K B
C428	87-010-197-080		CAP, CHIP 0.01 DM
C429	87-010-186-080		CAP,CHIP 4700P
C430	87-012-156-080		C-CAP,S 220P-50 CH
C431	87-010-545-080		CAP, ELECT 0.22-50V
C432	87-010-374-080		CAP, ELECT 47-10V
C433	87-010-401-080		CAP, ELECT 1-50V
C434	87-010-184-080		CHIP CAPACITOR 3300P(K)
C435	87-010-197-080		CAP, CHIP 0.01 DM
C436	87-010-260-080		CAP, ELECT 47-25V
C437	87-010-404-080		CAP, ELECT 4.7-50V
C438	87-012-368-080		C-CAP,S 0.1-50 F
C439	87-010-178-080		CHIP CAP 1000P
C440	87-010-145-080		C-CAP,S 1P-50 CH
C441	87-010-197-080		CAP, CHIP 0.01 DM
C442	87-010-314-080		C-CAP,S 22P-50V
C445	87-012-368-080		C-CAP,S 0.1-50 F
C446	87-012-368-080		C-CAP,S 0.1-50 F
C447	87-012-368-080		C-CAP,S 0.1-50 F
C448	87-010-315-080		C-CAP,S 27P-50 CH
C450	87-010-305-080		C-CAP 470P-50CH
C451	87-012-156-080		C-CAP,S 220P-50 CH
C455	87-010-247-080		CAP, ELECT 100-50V
C457	87-010-312-080		C-CAP,S 15P-50 CH
C458	87-010-312-080		C-CAP,S 15P-50 CH
C459	87-010-263-080		CAP, ELECT 100-10V
C460	87-015-819-080		CAPACITOR,0.01
C461	87-010-197-080		CAP, CHIP 0.01 DM
C462	87-010-248-080		CAP, ELECT 220-10V
C463	87-A11-132-080		AXIAL CAP 0.01U/50V(K)
C465	87-010-404-080		CAP, ELECT 4.7-50V
C466	87-012-368-080		C-CAP,S 0.1-50 F
C467	87-010-263-080		CAP, ELECT 100-10V
C469	87-012-154-080		C-CAP,S 150P-50 CH
C470	87-010-544-080		CAP, ELECT 0.1-50V
C471	87-A11-601-080		C-CAP,S 0.1-25 K B
C472	87-A11-601-080		C-CAP,S 0.1-25 K B
C473	87-A11-601-080		C-CAP,S 0.1-25 K B
C474	87-A11-601-080		C-CAP,S 0.1-25 K B
C475	87-015-819-080		CAPACITOR,0.01
C476	87-010-236-080		CAP,E 1000-10 SME
C477	87-010-197-080		CAP, CHIP 0.01 DM
C478	87-010-263-080		CAP, ELECT 100-10V
C479	87-010-197-080		CAP, CHIP 0.01 DM
C480	87-010-221-080		CAP, ELECT 470-10V
C481	87-010-405-080		CAP, ELECT 10-50V
C482	87-010-405-080		CAP, ELECT 10-50V
C489	87-012-368-080		C-CAP,S 0.1-50 F
C490	87-012-368-080		C-CAP,S 0.1-50 F
C491	87-015-819-080		CAPACITOR,0.01
C492	87-010-221-080		CAP, ELECT 470-10V
C493	87-010-184-080		CHIP CAPACITOR 3300P(K)
C494	87-A11-132-080		AXIAL CAP 0.01U/50V(K)
C501	87-016-495-000		EL CAP 3300UF/25V
C506	87-010-404-080		CAP, ELECT 4.7-50V
C507	87-010-401-080		CAP, ELECT 1-50V
C508	87-010-221-080		CAP, ELECT 470-10V
C511	87-010-263-080		CAP, ELECT 100-10V
C512	87-010-385-080		CAP, ELECT 220-25V
C521	87-010-197-080		CAP, CHIP 0.01 DM
C522	87-010-263-080		CAP, ELECT 100-10V
C544	87-010-405-080		CAP, ELECT 10-50V
C620	87-010-197-080		CAP, CHIP 0.01 DM
C762	87-010-198-080		CAP, CHIP 0.022
C765	87-016-669-080		C-CAP,S 0.1-25 K B
C766	87-010-260-080		CAP, ELECT 47-25V
C766	87-010-260-080		CAP,ELECT 47-25V
C4001	87-010-322-080		C-CAP,S 100P-50 CH
C4002	87-010-322-080		C-CAP,S 100P-50 CH
C4003	87-010-322-080		C-CAP,S 100P-50 CH
C4004	87-010-322-080		C-CAP,S 100P-50 CH
C4005	87-010-322-080		C-CAP,S 100P-50 CH
C4006	87-010-322-080		C-CAP,S 100P-50 CH
C4007	87-010-197-080		CAP, CHIP 0.01 DM
C4008	87-010-197-080		CAP, CHIP 0.01 DM
C4009	87-010-197-080		CAP, CHIP 0.01 DM
C4010	87-012-368-080		C-CAP,S 0.1-50 F
C5001	87-010-194-080		CHIP.CAP,S 0.047U/25V(Z)F
CF1	87-A90-128-010		FLTR,AM IF CFAL-455
CF2	82-785-747-010		CF MS2 GHY R
CF3	82-785-747-010		CF MS2 GHY R

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REF. NO	PART NO.	KANRI NO.	DESCRIPTION
CN0	8A-CT9-641-010		CONN,3P UL1007
CN401	87-A60-424-010		CONN,16P V TOC-B
CN501	87-049-919-010		CONN,3P EH V WHT
CN601	87-A60-109-010		CONN,2P V S2M-2W
CNA402	8Z-CT6-631-010		CONN ASSY,6P CD MO
L2	87-A50-347-010		COIL,FM BPF EX
L3	87-A50-349-010		COIL,BAR ANT AMW (COI)
L4	87-A50-345-010		COIL,FM RF EX
L5	87-A50-449-010		COIL,FM OSC U
L6	87-A50-337-010		COIL,AM OSC (TOKO)
L7	87-A50-336-010		COIL,AM IFT (TOKO)
L8	87-A50-335-010		COIL,FM IFT (TOKO)
L9	87-A50-334-010		COIL,FM DET (TOKO)
L10	87-005-849-080		COIL,10UH(CECS)
L330	88-CT6-620-010		REC OSC
L401	87-003-102-080		COIL, 10UH
L404	87-003-152-080		COIL, 100UH
L602	87-005-849-080		COIL,10UH(CECS)
L603	87-005-849-080		COIL,10UH(CECS)
PN301	87-A60-110-010		CONN,4P V S2M-4W
PN302	87-A60-111-010		CONN,5P V S2M 5W
PN751	88-CT6-608-010		CONN ASSY,8P MO
PN751	87-099-832-010		CONN,8P S2M-8W
PV1	87-A91-316-010		TUN-CAP,20P-160P U(TWD)
⚠R761	87-029-019-010		RES, FUSEIBLE 1/2W-2.2
SFR430	87-024-437-080		SFR100K,RH063EC
SFR761	87-024-239-010		SFR,2.2K V RH0632C
SW1	87-A91-548-010		SW,SL-2-3 SK23E01G06
SW301	88-CT6-619-010		BACK SLIDE SW 6P2T SHORTIN
X401	8Z-CD5-633-010		VIB, CER16.93MHZ FCR16.93M2
FRONT C.B			
C601	87-010-313-080		CAP, CHIP 18P
C602	87-010-315-080		C-CAP,S 27P-50 CH
C603	87-010-317-080		C-CAP,S 39P-50 CH
C604	87-010-314-080		C-CAP,S 22P-50V
C605	87-010-317-080		C-CAP,S 39P-50 CH
C606	87-010-197-080		CAP, CHIP 0.01 DM
C608	87-016-669-080		C-CAP,S 0.1-25 K B
C609	87-016-669-080		C-CAP,S 0.1-25 K B
C610	87-010-263-080		CAP, ELECT 100-10V
C611	87-016-669-080		C-CAP,S 0.1-25 K B
C612	87-010-248-080		CAP, ELECT 220-10V
C613	87-010-402-080		CAP, ELECT 2.2-50V
C614	87-010-196-080		CHIP CAPACITOR,0.1-25
C615	87-010-400-080		CAP, ELECT 0.47-50V
C616	87-010-401-080		CAP, ELECT 1-50V
C617	87-010-179-080		CAP,CHIP S B1200P
C618	87-010-263-080		CAP, ELECT 100-10V
C619	87-010-263-080		CAP, ELECT 100-10V
C830	87-010-197-080		CAP, CHIP 0.01 DM
C831	87-010-197-080		CAP, CHIP 0.01 DM
C832	87-015-628-080		C-CAP,1800P-50 B
C833	87-015-627-080		C-CAP,1000P-50 B
C834	87-010-404-080		CAP, ELECT 4.7-50V
C835	87-010-544-080		CAP, ELECT 0.1-50V
C836	87-015-627-080		C-CAP,1000P-50 B
C837	87-015-627-080		C-CAP,1000P-50 B
C838	87-010-401-080		CAP, ELECT 1-50V
C839	87-010-404-080		CAP, ELECT 4.7-50V
C840	87-010-221-080		CAP, ELECT 470-10V
C841	87-010-401-080		CAP, ELECT 1-50V
C842	87-012-140-080		CAP 470P
C844	87-010-401-080		CAP, ELECT 1-50V
J251	8A-CT9-630-010		JACK,MIC ST SW
J801	8A-CT9-630-010		JACK,MIC ST SW
L601	87-003-149-080		COIL,47UH
L801	87-003-098-080		FIXED IND 2.2UH K TP26
LCD601	8A-CT9-620-010		LCD,HLC7107ACT-9

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
LED602	8Z-CT6-632-010		LED,L-934LID
LED603	8Z-CT6-632-010		LED,L-934LID
LED604	8Z-CT6-632-010		LED,L-934LID
LED605	8Z-CT6-632-010		LED,L-934LID
LED606	8Z-CT6-632-010		LED,L-934LID
LED607	8Z-CT6-632-010		LED,L-934LID
LED608	8Z-CT6-632-010		LED,L-934LID
LED609	8Z-CT6-632-010		LED,L-934LID
LED610	8Z-CT6-632-010		LED,L-934LID
SW600	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW602	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW603	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW604	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW605	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW606	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW607	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW609	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW610	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW611	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW612	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW613	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW614	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW615	8Z-CT6-636-010		SW,TACT EVQJAC04M
SW616	8Z-CT6-636-010		SW,TACT EVQJAC04M
VR801	87-A90-768-010		VR,RTRY 10KAX1 1 H
X601	87-030-273-010		VIB,XTAL 32.768K5PPM
X602	87-A70-070-080		VIB,CER 5.76MHZ CRHF
PWR C.B			
C901	87-A10-577-080		CAP,CER 0.022-50 Z YF
C902	87-A10-577-080		CAP,CER 0.022-50 Z YF
C903	87-A10-577-080		CAP,CER 0.022-50 Z YF
C904	87-A10-577-080		CAP,CER 0.022-50 Z YF
⚠F901	87-035-139-010		FUSE, 2.5A T 250V<257 LH<S>>
⚠F901	87-035-367-010		FUSE, 3.15A 250V<EXCEPT 257 LH <S>>
⚠FC901	87-A90-160-080		FUSE CLAMP,FC 51F
⚠FC902	87-A90-160-080		FUSE CLAMP,FC 51F
MOTOR C.B			
M2	9X-262-576-910		MOTOR GEAR ASSY
PIN3	91-564-722-110		CONNECTOR 6P
SW1	91-572-085-120		LEAF SW

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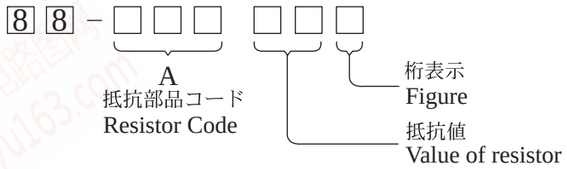
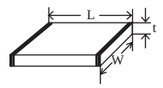
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



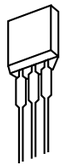
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

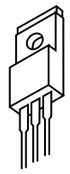
TRANSISTOR ILLUSTRATION

ECB
2SA1296
2SC1815
2SC2240
KTC3198

ECB
2SA1318

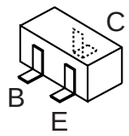


ECB
2SA933
2SC1740
DTC114TS

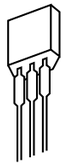


ECB
2SB1655

ECB
2SC2001

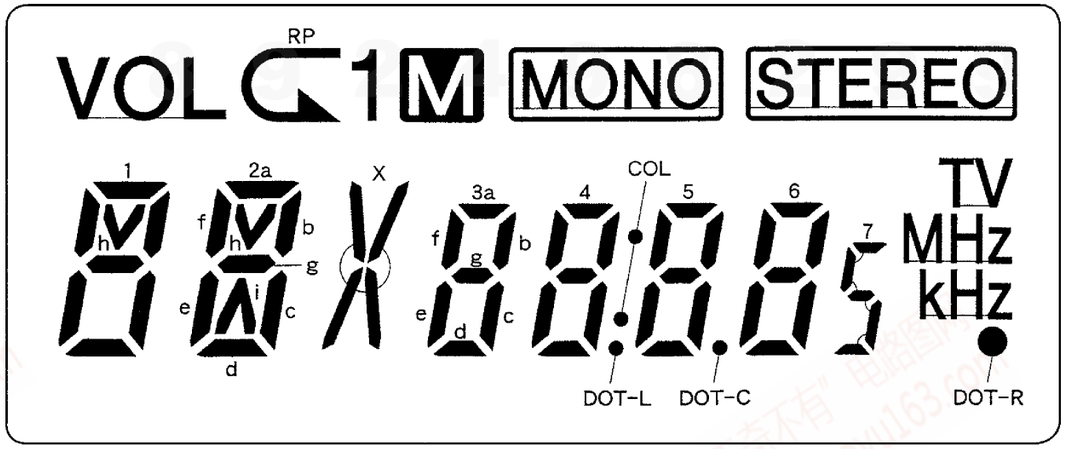


2SC2714
DTC114YK



ECB
DTC124XS

LCD DISPLAY



No	COM1	COM2	COM3
1	2b	2c	2d
2	1b	1c	1d
3	1a	1f	1e
4	1h	1g	VOL
5	2a	2f	2e
6	2h	2g	2 i
7	3f	3e	RP
8	3a	3g	3d
9	3b	3c	1
10	4f	4e	M
11	4a	4g	4d
12	4b	4c	X
13	COL	DOT-L	MONO
14	5f	5e	DOT-R
15	5a	5g	5d
16	5b	5c	DOT-C
17	6f	6e	STEREO
18	6a	6g	6d
19	6b	6c	7
20	TV	MHz	kHz
21	COM1	——	——
22	——	COM2	——
23	——	——	COM3

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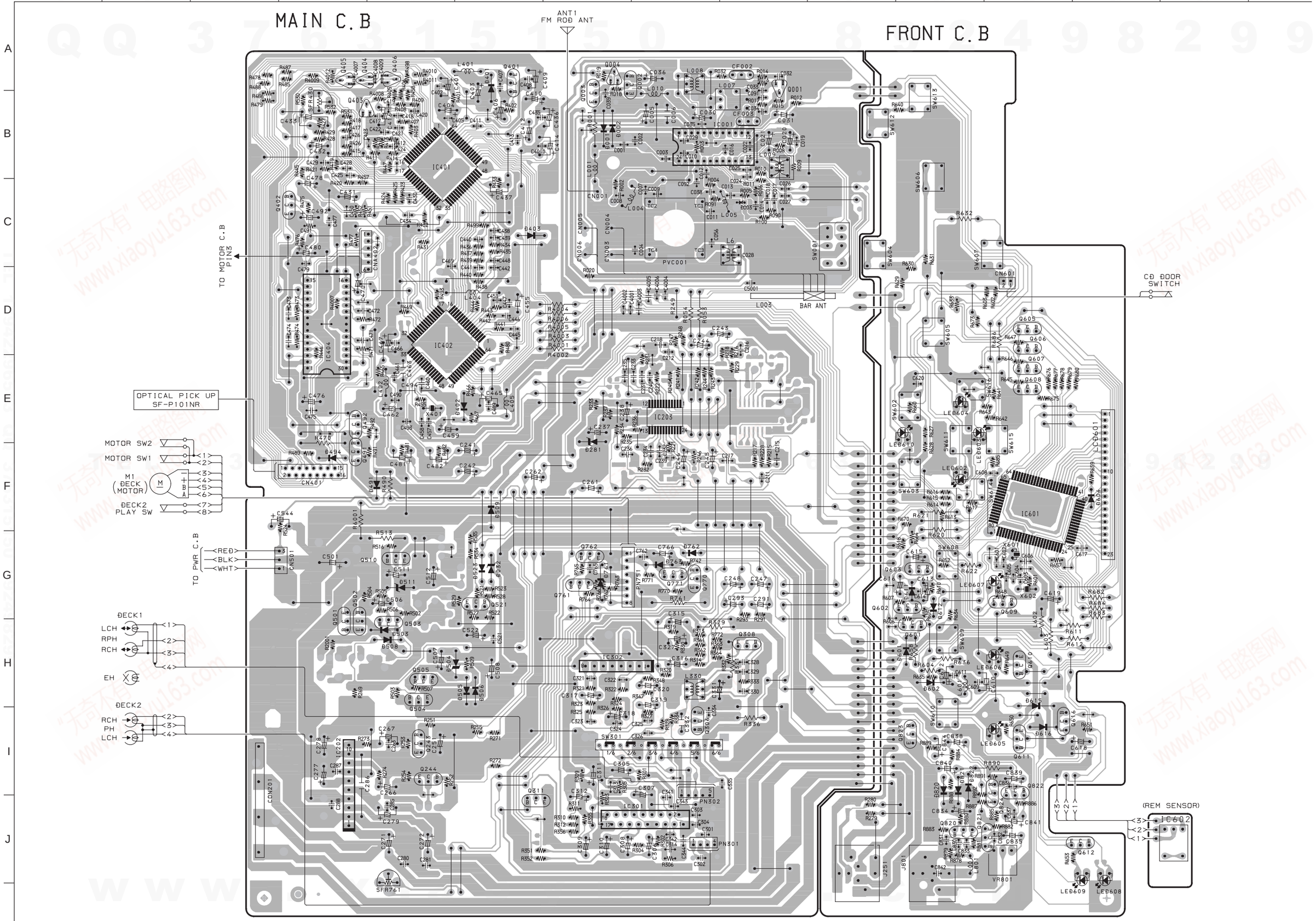
WIRING-1 (MAIN/FRONT)



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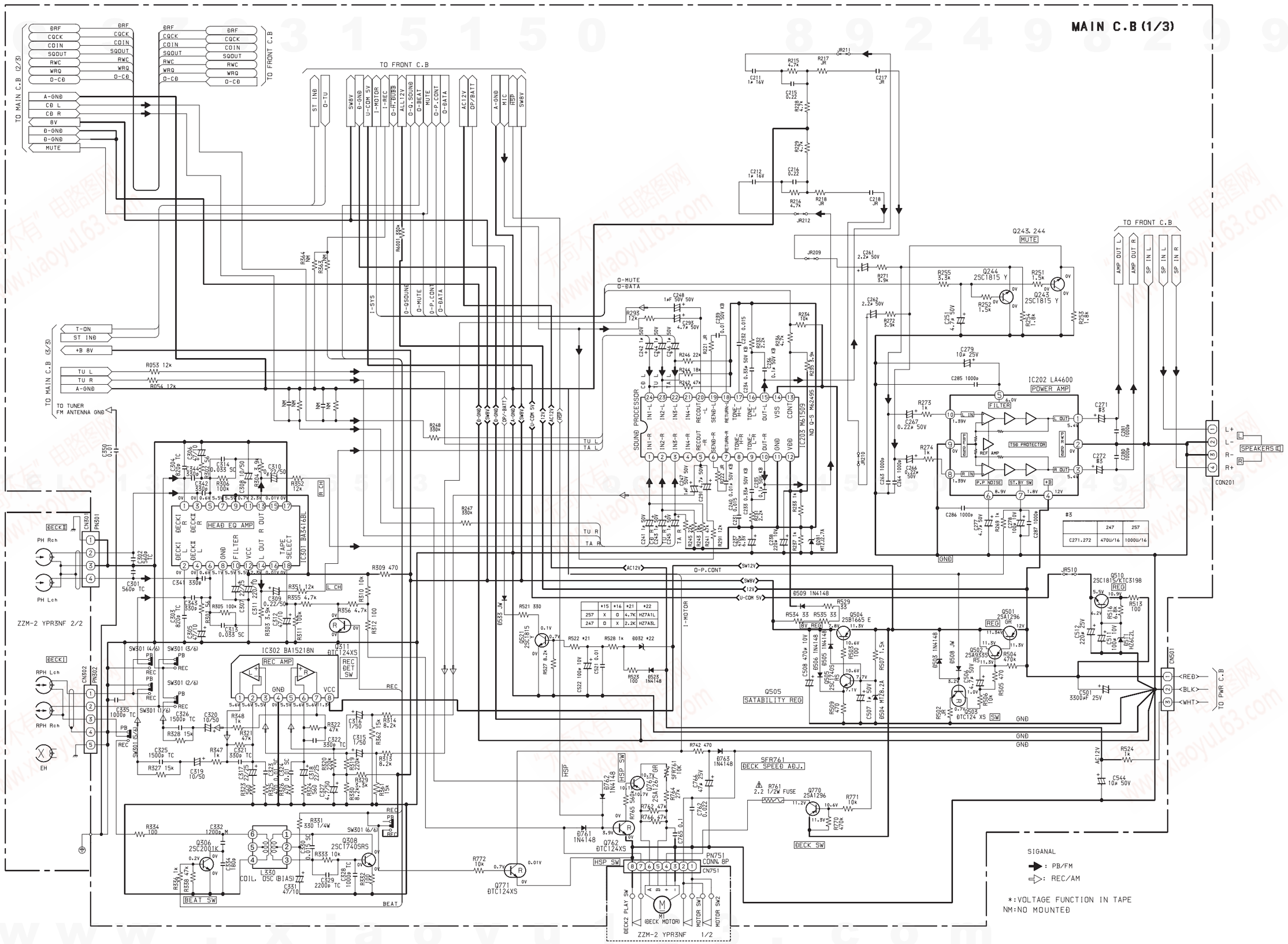
SCHEMATIC DIAGRAM-1 (MAIN)



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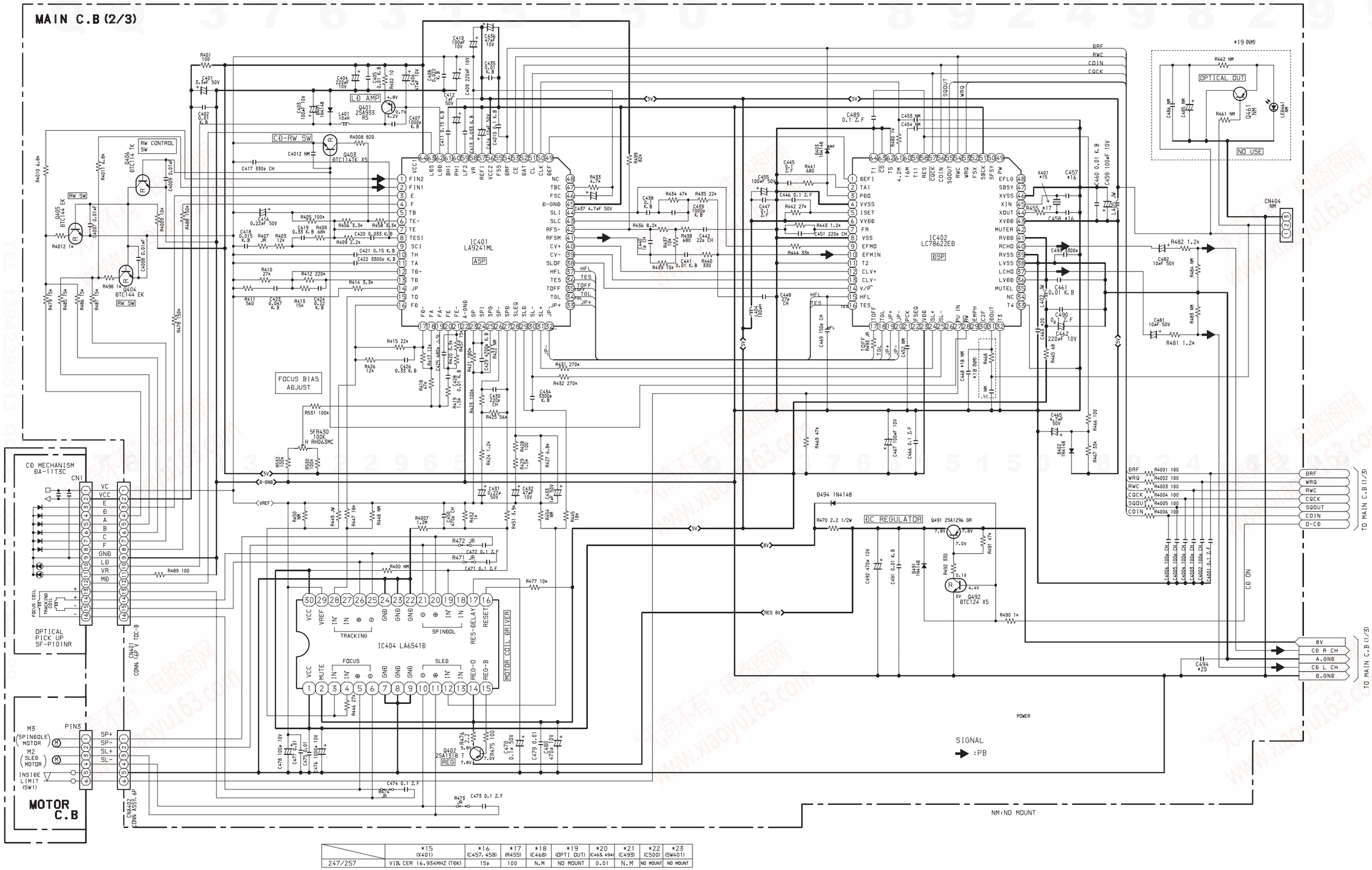
SCHEMATIC DIAGRAM-2 (CD)



	*15 (X401)	*16 (C457, 458)	*17 (R455)	*18 (C468)	*19 (OPTI OUT)	*20 (C465 494)	*21 (C493)	*22 (C500)	*23 (SW401)
247/257	VIB. CER 16.934MHZ (TÐK)	15p	100	N.M	NO MOUNT	0.01	N.M	NO MOUNT	NO MOUNT

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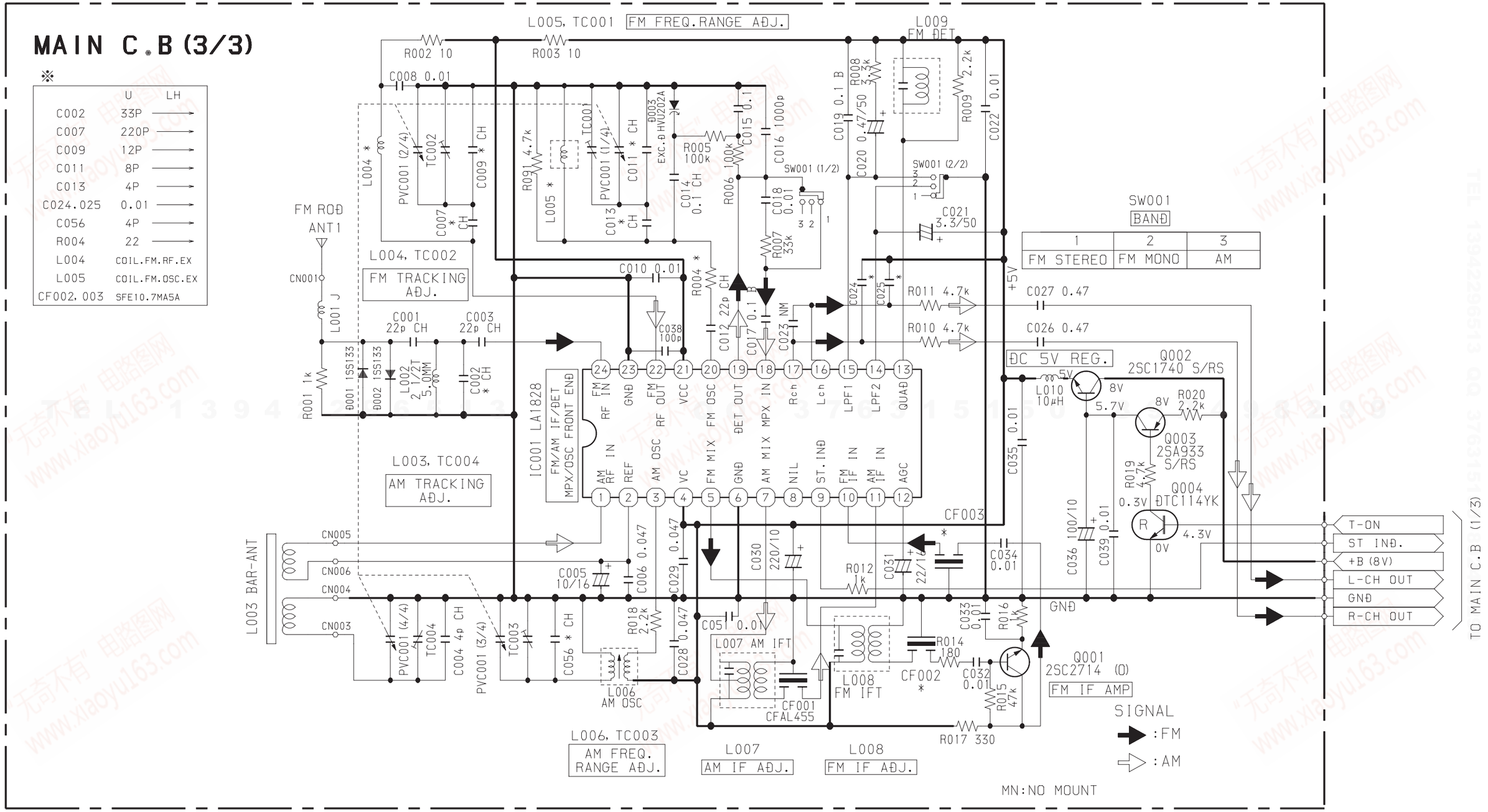
SCHEMATIC DIAGRAM-3 (TUNER)

Q Q 3 7 6 3 1 5 1 5 0 8 9 2 4 9 8 2 9 9



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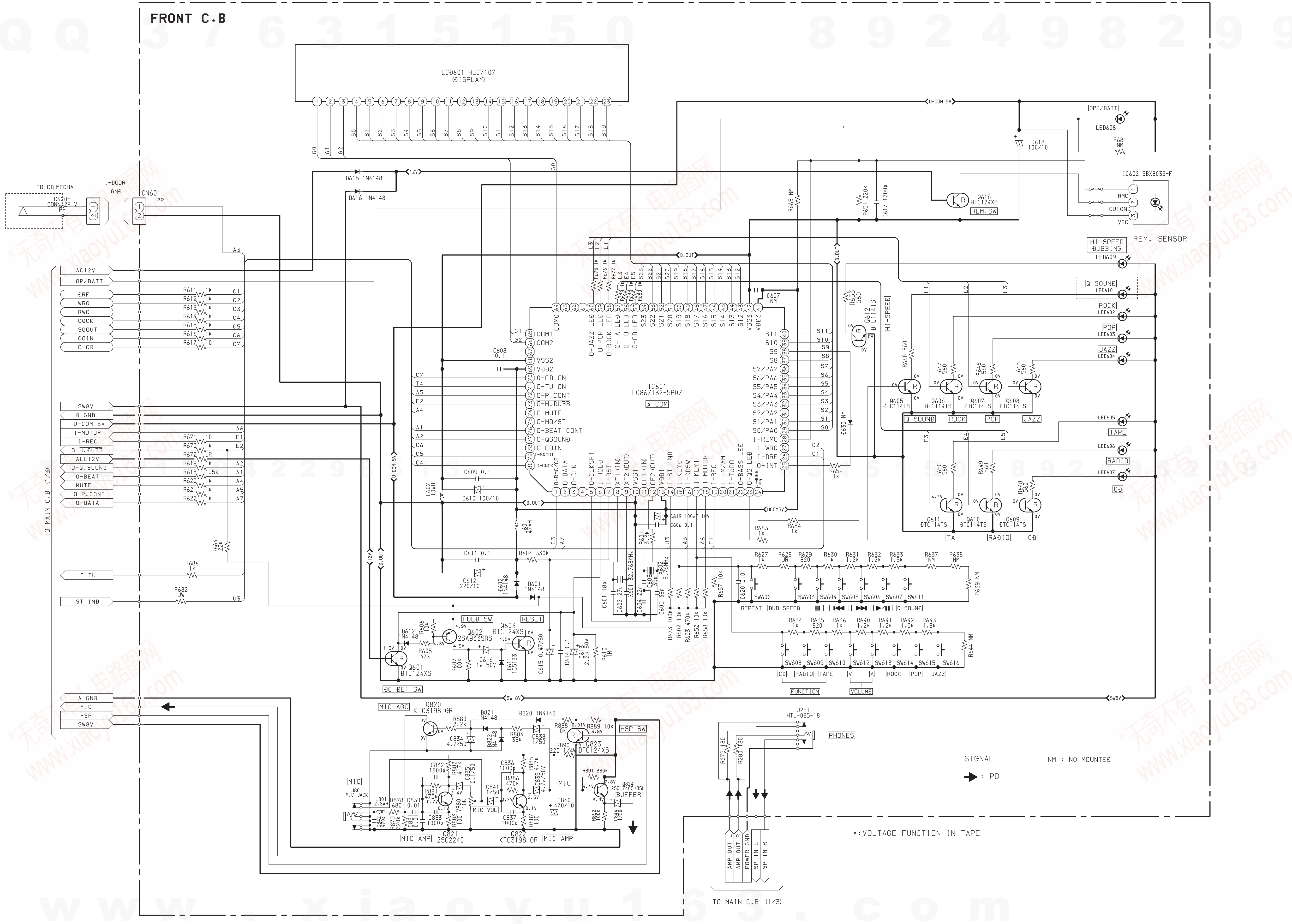
SCHEMATIC DIAGRAM-4 (FRONT)



FRONT C.B
LCD601 HLC7107
(DISPLAY)
IC601
LC867132-5P07
μ-COM
IC602 SBX8035-F
REM. SENSOR
TO CD MECHA
CN205
CONN 2P V
PH
I-DOOR
GND
CN601
2P
AC12V
OP/BATT
DRF
WRQ
RWC
CQCK
SQOUT
COIN
O-CD
SW8V
D-GND
U-COM 5V
I-MOTOR
I-REC
O-H.DUBB
ALL12V
O-Q.SOUND
O-BEAT
MUTE
O-P.CONT
O-DATA
O-TU
ST IND
A-GND
MIC
HSP
TO MAIN C.B (1/3)
OPE/BATT
HI-SPEED DUBBING
Q SOUND
ROCK
POP
JAZZ
TAPE
RADIO
CD
REM.SW
HI-SPEED
HOLD SW
RESET
DC DET SW
MIC AGC
MIC AMP
MIC VOL
HSP SW
BUFFER
PHONES
REPEAT
DUB SPEED
Q-SOUND
FUNCTION
VOLUME
AMP OUT L
AMP OUT R
POWER GND
SP IN L
SP IN R
SIGNAL
: PB
NM : NO MOUNTED
*:VOLTAGE FUNCTION IN TAPE

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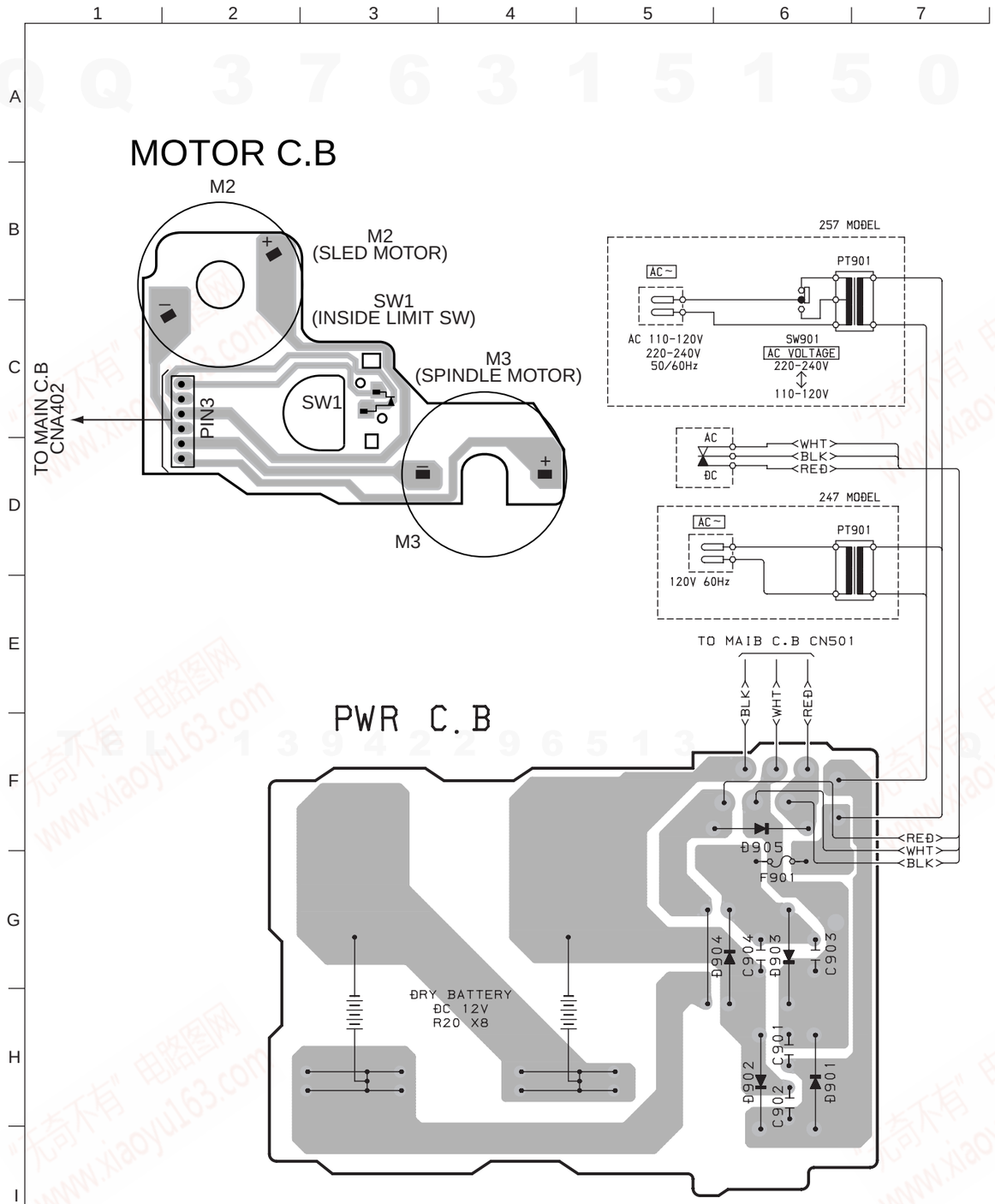
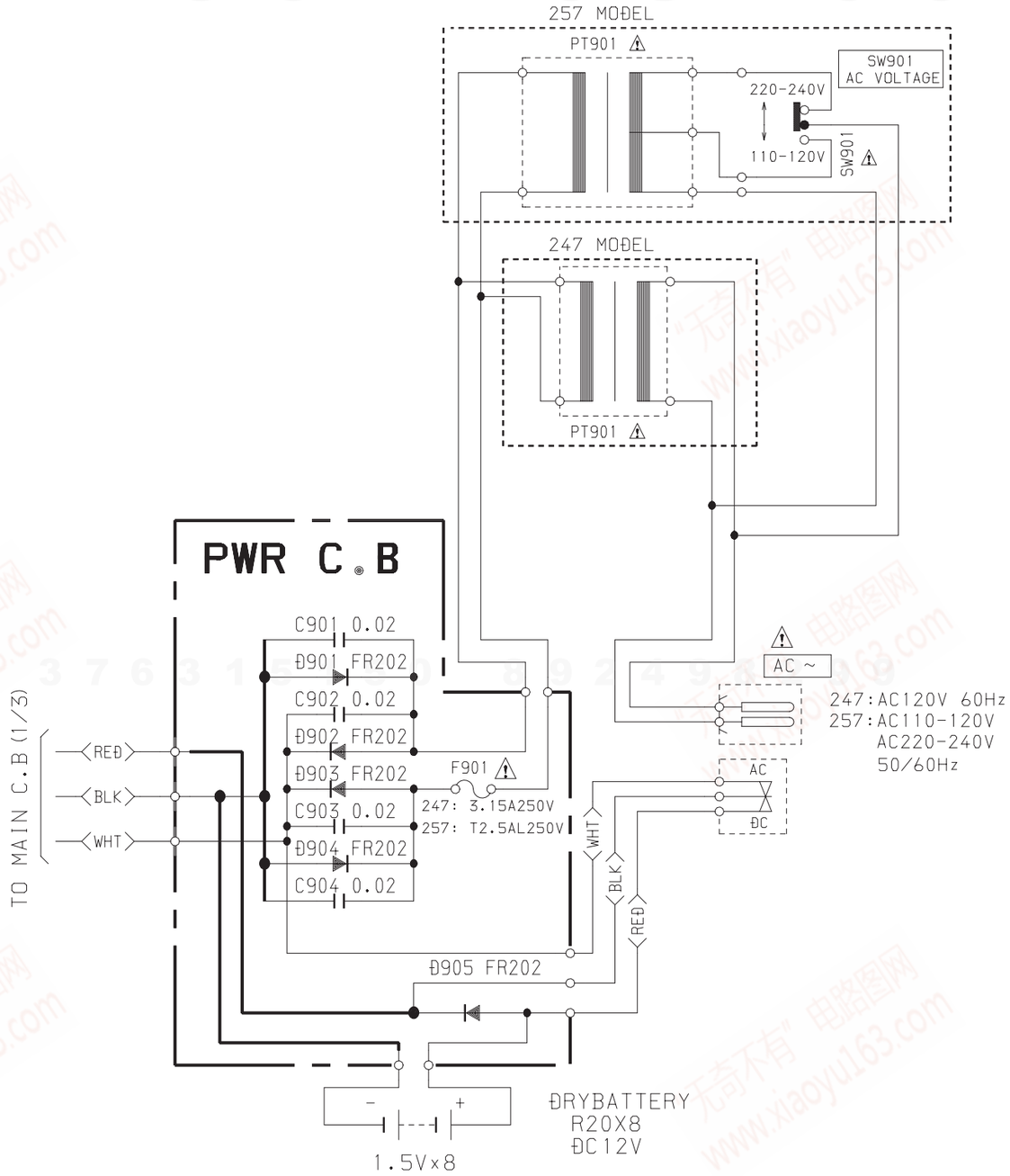
WIRING-2 (PWR, MOTOR)



SCHEMATIC DIAGRAM-5 (POWER)



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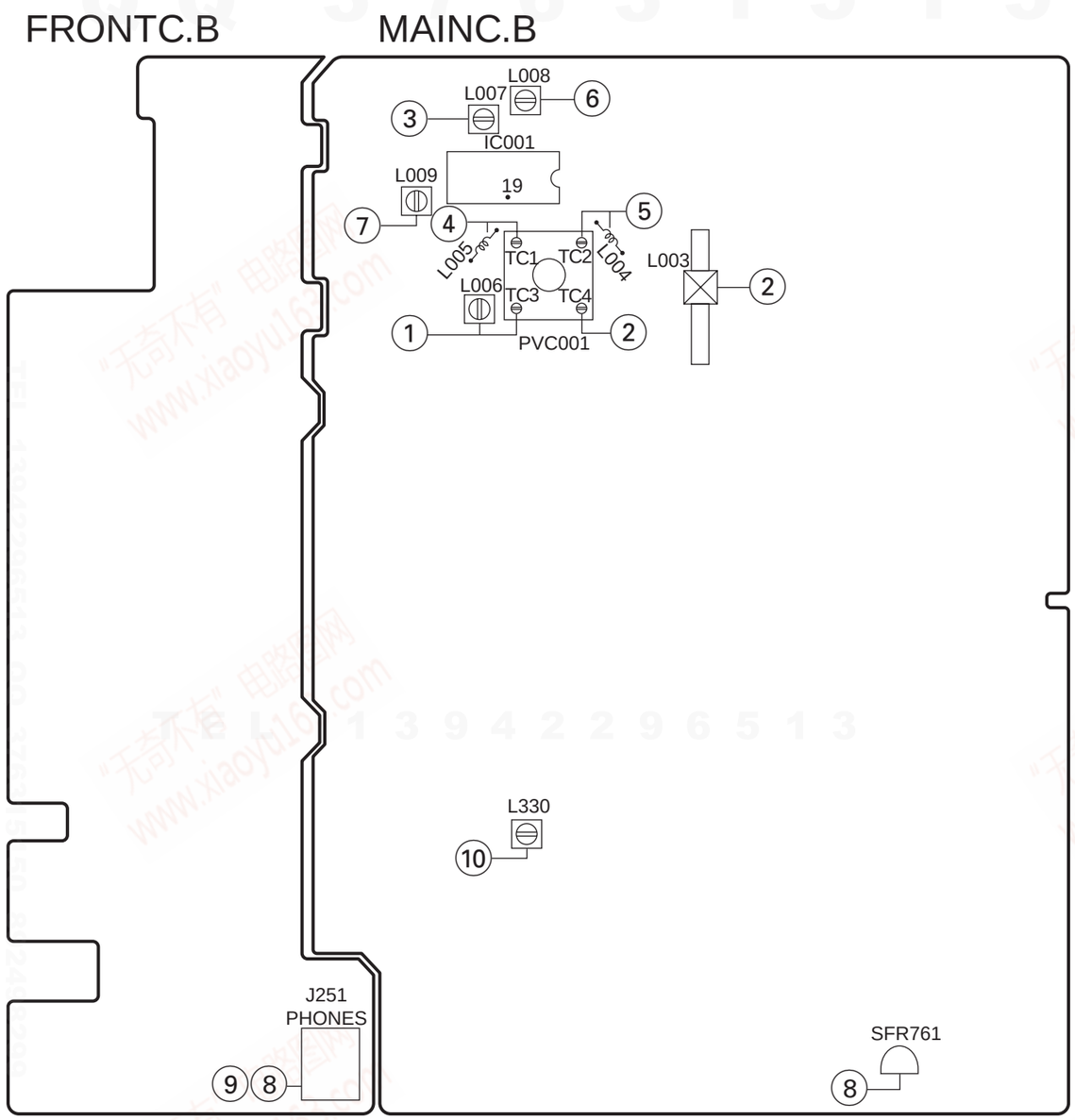
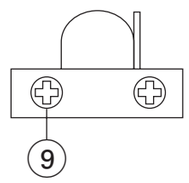
ELECTRICAL ADJUSTMENT



RPH (DECK1)/PH (DECK2)



< TUNER SECTION >

1. AM Freq. Range Adjustment
   L006 ..... 517kHz
   TC003 ..... 1750kHz

2. AM Tracking Adjustment
   L003 ..... 600kHz
   TC004 ..... 1400kHz

3. AM IF Adjustment
   Settings: • Test point: IC001 (L81828) 19PIN
   • Adjustment location: L007
   Method: Adjust L007 so that the output level at 1000kHz becomes maximum.

4. FM Freq. Range Adjustment
   L005 ..... 87.0MHz
   TC001 ..... 109.0MHz

5. FM Tracking Adjustment
   L004 ..... 90.0MHz
   TC002 ..... 108.0MHz

6. FM IF Adjustment
   Settings: • Test point: IC001 (L81828) 19PIN
   • Adjustment location: L008
   Method: Adjust L008 so that the output level at 98.0MHz becomes balanced.

7. FM Balance Adjustment
   Settings: • Test point: IC001 (L81828) 19PIN
   • Adjustment location: L009
   Method: Adjust L009 so that the output level at 98.0MHz becomes balanced.

< TAPE SECTION >

8. Tape speed Adjustment
   Settings: • Test tape: TTA-100
   • Test point: J251 (PHONES jack)
   • Adjustment location: SFR761
   Method: Play back the test tape and adjust SFR761 so that the frequency counter reads 3000Hz ±5Hz.

9. Head Azimuth Adjustment
   Settings: • Test tape: TTA-320
   • Test point: J251 (PHONES jack)
   • Adjustment location: Azimuth adjustment screw.
   Method: Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.

10. Bias frequency Adjustment
    L330 ..... 56kHz ±2kHz

PRACTICAL SERVICE FIGURE

< TUNER SECTION >

< FM SECTION >

Sensitivity: (THD 3%)	Less than19dB (88.0MHz) Less than19dB (98.0MHz) Less than19dB (108.0MHz)
Signal to Noise Ratio: (Input 54dB)	More than 57dB (at 98.0MHz)
Distortion: (Input 54dB)	Less than 1.5% (at 98.0MHz)
Intermediate frequency:	10.7MHz ±0.3MHz
Stereo separation:	More than 18dB

< AM SECTION >

Sensitivity: (S/N 10dB)	Less than 45dB (at 600kHz) Less than 48dB (at 1000kHz) Less than 45dB (at 1400kHz)
Distortion: (Input 74dB)	Less than 1.5%
Intermediate frequency:	450kHz±5kHz

< CASSETTE SECTION >

Tape speed:	3000Hz±30%
Wow & flutter:	Less than 0.35% (JIS RMS)
Take-up torque:	30-60g-cm (DECK 1/2)
FF torque:	55-140g-cm (DECK 1/2)
Rew torque:	55-140g-cm (DECK 1/2)
Back tension:	3±2g-cm
S/N ratio:	More than 40dB
Distortion:	Less than 3.0% (PB)
Noise (PB):	Less than 1mV (AC/DC, MIN)
Erasing Ratio (W/FILTER):	More than 40dB

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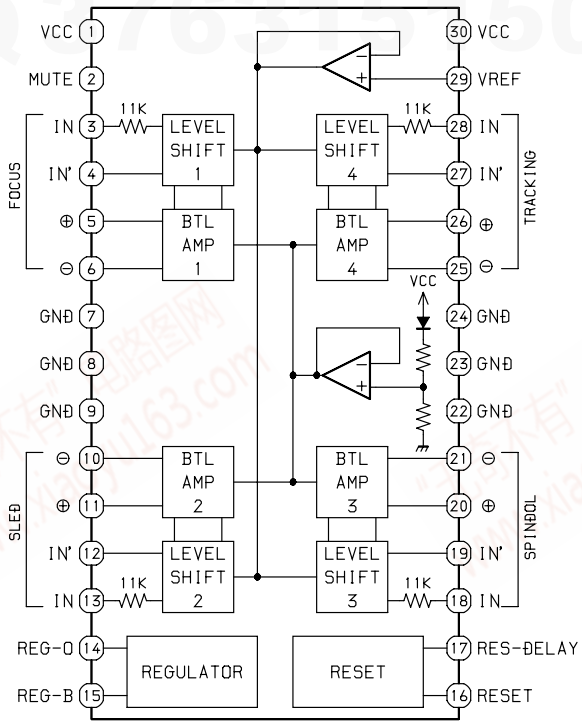
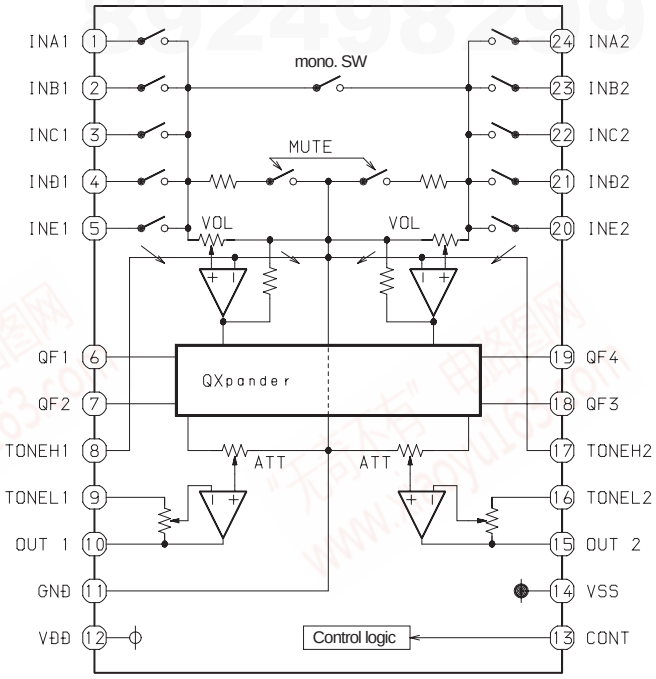
IC BLOCK DIAGRAM

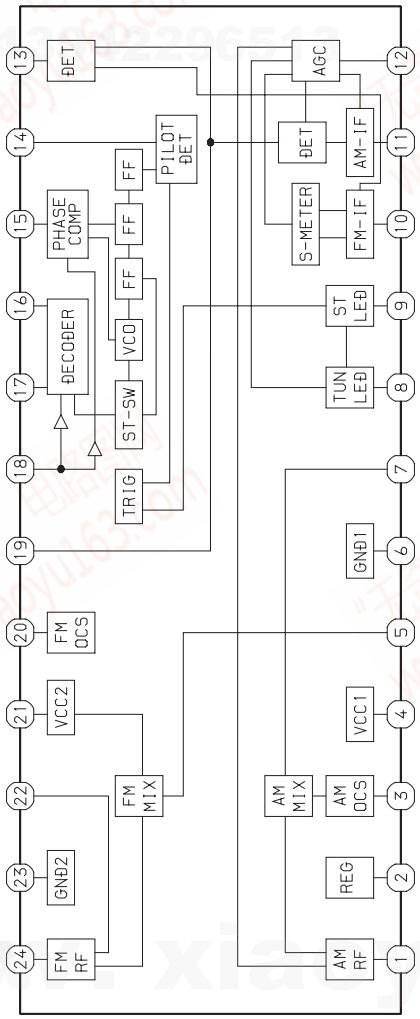
IC, LA6541D



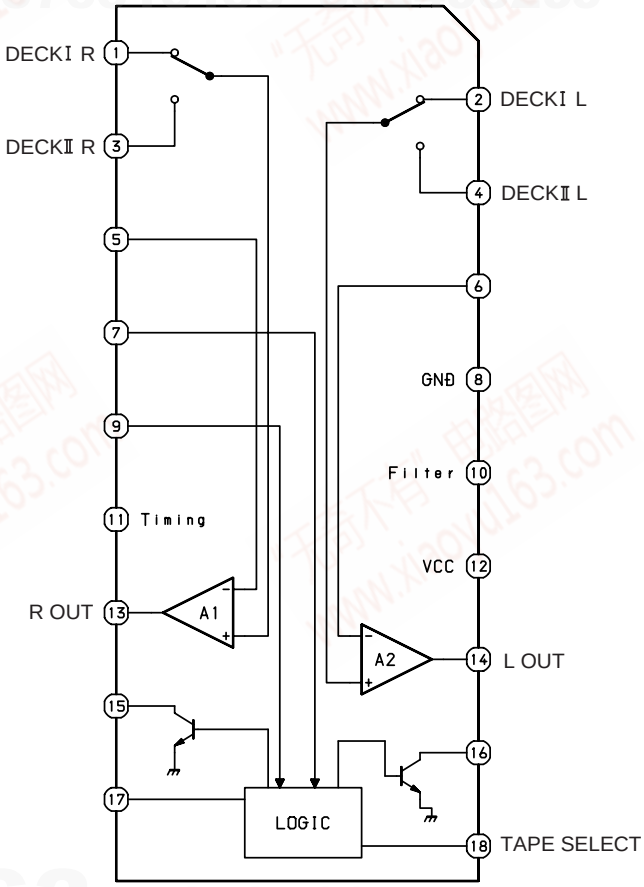
IC, M61509



IC, LA1828



IC, BA3416BL



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IC601(LC867132V- ***)																																					
PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD	0	0	0	0	0	0	3.5	1.4	2.5	0	2.0	2.5	4.5	0.5	5.0	0	5.0	5.0	0	0	0	4.5	0	0	4.5	5.0	1.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
TUNER	0	0	0	0	0	0	4.5	1.4	2.5	0	4.0	5.0	5.0	4.5	5.0	0	5.0	5.0	0	0	0	5.0	0	0	0	0	0	4.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0
TAPE	0	0	0	0	0	0	4.5	1.4	2.5	0	2.0	2.5	4.5	0.5	5.0	0	5.0	1.5	0	0	0	5.0	0	0	4.5	0	0	4.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0
PIN NO	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD	0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.5	0	0	0	0	0	0	0	0	2.5	2.5	2.5	0	0	4.5	4.5	0	4.5	4.5	0	0	0	0	4.5	0	4.5
TUNER	5.0	0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	0	0	0	0	0	0	2.5	2.5	2.5	0	0	4.5	0	5.0	4.5	5.0	0	0	0	0	0	0	0
TAPE	5.0	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	4.5	0	0	0	0	0	0	2.5	2.5	2.5	0	0	5.0	0	0	4.5	4.5	0	0	0	0	0	0	0

IC602	
1(B+)	5.5
2	0
3	4.5

IC203(M61509)																								
PIN NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
VOLT	1.5	1.5	2.0	0	2.0	2.5	2.5	2.5	2.5	2.5	2.0	4.5	3.0	0	0	0	0	0	0	0	0	0	0	0

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IC401(LA9241ML)																															
PIN NO	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**
STOP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
PLAY	2.5	1.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
RW	2.5	1.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	0	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0
PIN NO	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
STOP	0	5.0	0	1.0	0	0	0	0	1.5	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	4.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	4.5	0	5.0
PLAY	0	5.0	0	1.0	0	0	0	0	2.0	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	2.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	1.0	0	5.0
RW	0	5.0	0	1.0	0	0	0	0	2.0	2.5	2.5	2.5	0	2.5	2.5	0	0	2.5	2.5	4.5	0	5.0	0	5.0	2.5	2.5	1.0	3.0	2.0	1.0	0	5.0

IC402(LC78622ED)																															
PIN NO	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**
STOP	0	0	0.5	0	1.5	4.0	0	0	0	0	0	0	0	0	0	1.0	0.5	5.0	0	0	2.5	0	5.0	0	0	0	4.5	0	0	0	0	0
PLAY	0	0	1.5	0	1.5	4.0	0	0	2.5	2.5	0	0	0	0	0	1.0	0	5.0	0	0	2.5	0	0	0	0	0	4.0	0	0	0	2.5	0
RW	0	0	1.5	0	1.5	4.0	0	0	2.5	2.5	0	0	0	0	0	1.0	0	5.0	0	0	2.5	0	0	0	0	0	4.0	5.0	0	0	2.5	0
PIN NO	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
STOP	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.5	0	0	0
PLAY	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	0	1.0	0	0	0	4.5	4.5	0	0	2.5	0	0	0
RW	0	0	0	5.0	2.0	0	0	2.0	5.0	0	5.0	2.0	0	0	0	0	0	0	0	0	1.0	0	0	0	4.5	4.5	0	0	2.5	0	0	0

IC404(LA6541D)																														
PIN NO	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
STOP	7.5	0	2.5	2.5	3.5	3.5	0	0	0	3.5	3.5	2.5	0	5.0	7.0	5.0	5.0	0	4.5	3.5	3.5	0	0	0	0	3.5	0	2.5	0	7.5
PLAY	7.5	0	2.5	2.5	3.0	3.5	0	0	0	3.0	3.5	2.5	0	5.0	7.0	5.0	5.0	0	2.5	3.5	3.0	0	0	0	3.0	3.5	0	2.5	2.5	7.5

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IC DESCRIPTION

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE-	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD-	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD-	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA-	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE-	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	SP	O	Signal ended output of the CV+and CV- pin input signal.
24	SPI	I	Spndle amp input.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP-	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL-, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP-, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

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Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS-	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (± search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

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IC, LC78622ED

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	T2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLK-	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP-	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24	SL+	O	Moves the sled to outer circumference.	
25	SL-	O	Moves the sled to inner circumference.	
26	—	—	Not connected.	
27	PUIN	I	CD pickup inner switch detection.	
28	$\overline{RW}$	O	Read, wright signal.	
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.	
30	C2F	O	C2 flag output pin.	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).	
32, 33	T3, T4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

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Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	RES	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	T11	O	Test signal output pin. Use this pin as open (normally L output).
60	16M	O	16.9344 MHz output pin.
61	4.2M	O	4.2336 MHz output pin.
62	T5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	T1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

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IC, LC867132V-5P07

Pin No.	Pin Name	I/O	Description
1	O-RMC/CE	O	CD read/write control output and TU CE.
2	O-DATA	O	Data output to M62495FP.
3	O-CLK	O	Output CLK to tuner PLL.(Not connected)
4	—	—	Not Connected.
5	O-CK SFT	O	Clock shift output of the microcomputer.
6	I-HOLD	I	Hold status detection.
7	I-RST	I	Microcomputer reset.
8	XT1 (IN)	I	Connected to 32.768KHZ crystal oscillator.
9	XT2 (OUT)	O	
10	VSS1	—	GND.
11	CF1 (IN)	I	Connected to 6MHZ Ceramic Filter.
12	CF2 (OUT)	O	
13	VDD1	—	Power supply for microcomputer (+5V).
14	I-ST IND	I	FM STEREO status input.
15	I-KEYO	I	KEY AD input.
16	I-CD SW	I	CD DOOR SW status detection input.
17	I-KEY1	I	KEY AD input.
18	I-MOTOR	I	DECK MECHA MOTOR status input.
19	I-REC	I	REC status input.
20	I-FM/AM	I	FM, AM status input. (Not connected)
21	I-TU DO	I	Data input from tuner PLL.(Not connected)
22	O-BASS LED	O	BASS LED ON/OFF control output.
23	O-QS LED	O	Q-Sound LED ON/OFF control output.
24	O-DUBB LED	O	LED control output used for high-speed dubbing.
25	O-INT	O	INT DIODE MATRIX detection output.(Not connected)
26	I-DRF	I	CD RF level detection input.
27	I-WRQ	I	CD sub-code Q standby input.
28	I-REMO	I	Remote control input.
29	S0-PA0	O	LCD segment output.
30	S1/PA1	O	LCD segment output.
31	S2/PA2	O	LCD segment output.
32	S3/PA3	O	LCD segment output.
33	S4/PA4	O	LCD segment output.
34	S5/PA5	O	LCD segment output.
35	S6/PA6	O	LCD segment output.
36	S7/PA7	O	LCD segment output.
37-40	S8~S11	O	
41	VDD3	—	Power supply for microcomputer (+5V).
42	VSS3	—	GND.
43-54	S12~S23	O	LCD segment output.
55	O-CD LED	O	LED ON/OFF control output for CD functions.

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Pin No.	Pin Name	I/O	Description
56	O-TU LED	O	LED ON/OFF control output for TU functions.
57	O-TA LED	O	LED ON/OFF control output for TAPE functions. (Not Connected)
58	O-ROCK LED	O	LED ON/OFF control output for ROCK.
59	O-POP LED	O	LED ON/OFF control output for POP.
60	O-JAZZ LED	O	LED ON/OFF control output for JAZZ.
61-63	—	—	Not connected.
64-66	COM0-COM2	O	LCD common output.
67	—	—	Not connected.
68	VSS2	—	GND.
69	VDD2	—	Power supply for microcomputer (+5V).
70	O-CD ON	O	CD PWR control output.
71	O-TU ON	O	TU PWR control output.
72	O-P.CONT	O	Power supply control output.
73	O-HI DUBB (NC)	O	Dubbing speed control output.
74	O-MUTE	O	Main mute output.
75	O-MO/ST	O	FM mono/stereo output.
76	O-BEAT CONT	O	BEAT switch over output.
77	O-QSOUND	O	Q-Sound ON/OFF output.
78	O-COIN	O	CD command output.
79	I-SQOUT	I	CD sub-code Q input.
80	O-CQCK	O	CLK for CD commands/sub-codes.

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MECHANICAL PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-CT9-006-010		WINDOW,CASS L
2	8A-CT9-002-010		BOX,CASS L
3	8A-CT9-007-010		WINDOW,CASS R
4	8A-CT9-011-010		BTN,CD A
5	86-CT9-210-010		SPR-T,CASS
6	8A-CT9-003-010		BOX,CASS R
7	8A-CT9-019-010		KNOB,SL BAND
8	8A-CT9-008-010		WINDOW,DISP<EXCEPT 257 LH<S>>
8	8A-CT9-055-010		WINDOW,DISP LH<257 LH<S>>
9	8A-CT9-001-010		CABI,FR<EXCEPT 257 LH<S>>
9	8A-CT9-050-010		CABI,FR LH<257 LH<S>>
10	8A-CT9-021-010		LENS,POWER
11	8A-CT9-020-010		LENS,FUNC
12	8A-CT9-010-010		KEY,FUNC
13	8A-CT9-202-010		LEVER,BAND
14	8A-CT9-022-010		LENS,GEQ
15	8A-CT9-215-010		SPR-P,REC A
16	8A-CT9-023-010		BTN,QSOUND<EXCEPT 257 LH<S>>
17	8A-CT9-016-010		BTN,GEQ<EXCEPT 257 LH<S>>
17	8A-CT9-051-010		BTN,GEQ LH<257 LH<S>>
18	87-063-165-010		OIL-DMPR 150
19	8A-CT9-015-010		BTN,VOL
20	8A-CT9-012-010		BTN,CD B
21	86-CT9-208-010		HLDR,KEY CASS
22	8A-CT9-013-010		KEY,CASS L
23	8A-CT9-014-010		KEY,CASS R
24	8A-CT9-216-010		SPR-P,REC B
25	86-CT9-205-110		HLDR,REC
26	88-CD6-661-010		HLDR,BAR ANT.
27	88-CT6-606-010		FFC WIRE 16P(1.0)
28	8A-CT9-208-010		DRUM,GEAR
29	88-CH6-220-010		CUSHION,CD A
30	8A-CT9-211-010		HLDR,GEQ
31	8A-CT9-205-010		HLDR,LCD
32	8A-CT9-203-010		HLDR,FUNC
33	8A-CT9-017-010		KNOB,RTRY MIC
34	8A-CT9-204-010		HLDR,POWER
35	8Z-CT6-214-010		RING,CHUCK
36	8Z-CT6-213-010		BASE,CHUCK
37	87-036-368-010		MAGNET
38	86-CT9-222-010		PLATE,MAGNET
39	86-CT9-217-010		HLDR,CHUCK A(S)
40	8A-CT9-004-010		BOX,CD
41	8A-CT9-005-010		WINDOW,CD
42	8A-CT9-009-010		POINTER,TUN
43	8A-CT9-207-010		HLDR,POINTER
44	8A-CT9-201-010		CHAS,CD
45	87-036-389-010		SW,PUSH LOCK<EXCEPT 247 U<S>>
46	8A-CT9-212-010		SPR-T,CD
47	8A-CT9-209-010		GEAR,POINTER
48	8A-CT9-210-010		GEAR,ADAP
49	8Z-CT9-064-010		PANEL CD
50	87-063-164-010		OIL-DMPR 80
51	8A-CT9-018-010		KNOB,RTRY TUN
52	8A-CT9-028-010		COVER, TUN
53	86-CT9-206-010		HLDR,TRANS<EXCEPT 257 LH<S>>
54	86-CT9-213-010		SPR-C,BATT(-)
55	86-CT9-207-010		HLDR,ANT
56	86-CT9-223-010		CUSH,FOOT
57	86-CT9-212-010		SPR-C,BATT LINK
58	8Z-CT9-044-010		CABI,REAR
59	86-CT6-036-010		HANDL,RF
60	88-CT6-022-010		COVER, HNDL
61	86-CT6-035-010		LID,BATT RF
62	86-CT9-040-010		BADGE,AIWA -<247 U<S>>
62	87-B00-010-010		BADGE,AIWA 30.5-5.2 S 2.5L <EXCEPT 247 U<S>>
63	8A-CT9-030-010		NET,SPKR
64	8A-CT9-027-010		FRAME,SPKR NET
65	8A-CT9-024-010		CABI,SPKR FR
65	8A-CT9-025-010		CABI,SPKR FR R
66	86-CT9-117-010		CABI,SPKR-REAR L RF
66	86-CT9-118-010		CABI,SPKR-REAR R RF
67	86-CT9-121-010		HLDR,CORD RF
68	88-CT6-633-010		ANT,ROD
⚠ 69	88-CT6-631-010		POWER TRANS,EI-57/25<257 LH<S>>
⚠ 69	88-CT7-629-010		PT,U<EXCEPT 257 LH<S>>
70	87-A60-178-010		JACK,AC E W/SW<257 LH<S>>
70	87-A60-177-010		JACK,AC U W/SW<EXCEPT 257 LH<S>>
71	8Z-CT9-059-010		PLATE,SPKR (3.2 OHM)<257 LH<S>>
A	87-751-097-410		SCREW 3X12
B	81-CD5-204-010		SCREW CD
C	87-751-095-410		VT2+3-8 W/O
D	87-571-095-410		VIT+3-8
E	87-651-100-410		VT1+3-16
F	87-651-075-210		VT1+2.6-10
G	87-651-104-410		VT1+3-30
H	87-261-072-410		V+2.6-5

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

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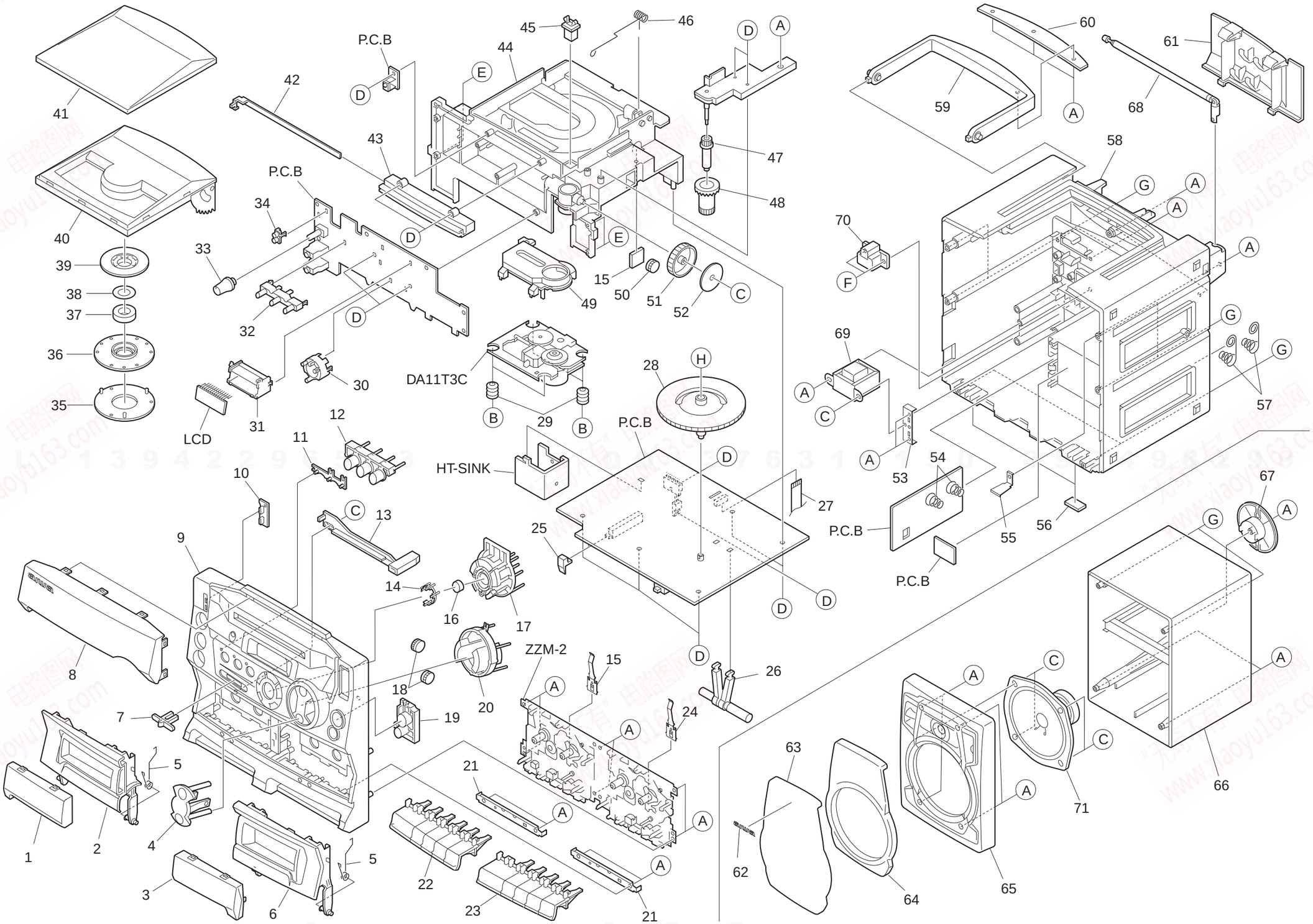
MECHANICAL EXPLODED VIEW 1/1



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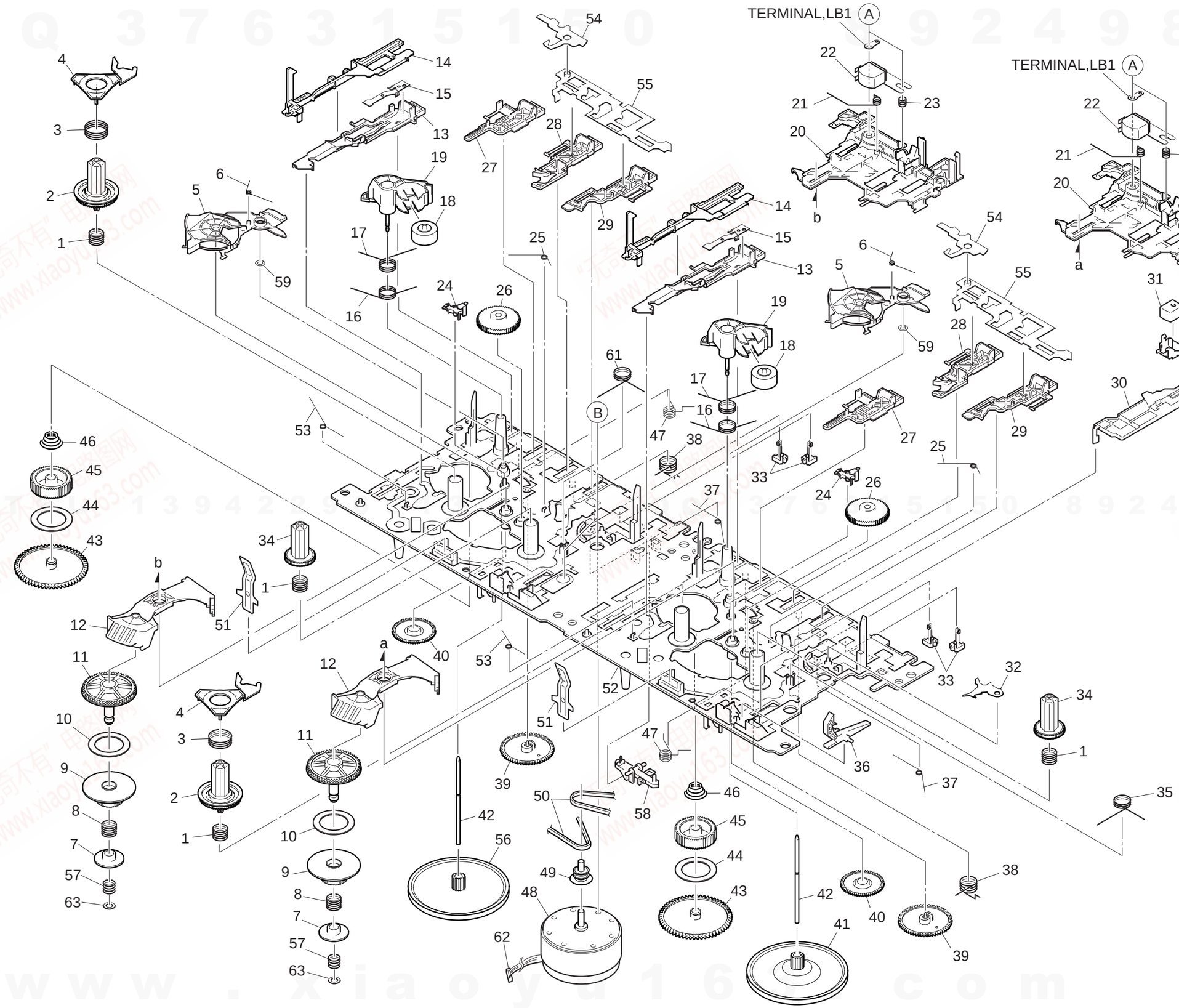
TAPE MECHANISM EXPLODED VIEW 1/1



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TAPE MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C,REEL R
2	8Z-ZM1-225-110		GEAR,REEL R
3	8Z-ZM1-253-110		SPR-C,AUTO SENSOR
4	8Z-ZM1-217-110		LEVER,AUTO SENSOR
5	8Z-ZM1-212-110		LEVER,T-UP
6	8Z-ZM1-245-010		SPR-T,AUTO
7	8Z-ZM1-236-010		CLR,SLIP FF/REW
8	8Z-ZM1-252-010		SPR-C,FF/REW
9	8Z-ZM1-230-010		GEAR,SLIP FF/REW A
10	8Z-ZM1-269-010		FELT,FF/REW 2
11	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
12	8Z-ZM1-237-010		LEVER,FF/REW 2
13	8Z-ZM1-209-210		LEVER,PAUSE
14	8Z-ZM1-218-110		LEVER,E-LOCK H
15	8Z-ZM1-256-010		SPR-P,PAUSE
16	8Z-ZM1-244-010		SPR-T,T-UP
17	8Z-ZM1-247-210		SPR-T,PINCH
18	8Z-ZM1-261-110		ROLLER ASSY,PINCH
19	8Z-ZM1-221-010		LEVER,PINCH
20	8Z-ZM1-205-210		LEVER,PLAY
21	8Z-ZM1-248-110		SPR-T,BRG
22	87-A90-403-110		HEAD,RPH MS15R
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	8Z-ZM1-216-010		LEVER,AUTO
25	8Z-ZM1-246-010		SPR-T,AUTO 2
26	8Z-ZM2-214-010		GEAR,IDL REW ZZM-2
27	8Z-ZM2-212-010		LEVER,STOP ZZM-2
28	8Z-ZM1-207-010		LEVER,FF
29	8Z-ZM1-206-010		LEVER,REW
30	8Z-ZM1-210-010		LEVER,REC<YR1NF>
30	8Z-ZM1-211-110		LEVER,REC 2<YR2NF,YR3NF>
31	87-A90-404-010		HEAD,EH LE15B<YR1NF>
31	87-A91-533-010		HEAD,EH PH-K380<YR2NF,YR3NF>
32	8Z-ZM2-218-010		LEVER,REC LOCK ZZM-2
33	87-A91-492-010		SW,LEAF MSW18560
34	8Z-ZM1-226-010		GEAR,REEL L
35	8Z-ZM1-241-010		SPR-T,PLAY
36	8Z-ZM1-220-110		LEVER,REC SENSOR
37	8Z-ZM1-249-010		SPR-T,FR
38	8Z-ZM1-242-110		SPR-T,FF/REW
39	8Z-ZM1-229-010		GEAR,CAM
40	8Z-ZM1-232-010		GEAR,IDL FF/REW
41	8Z-ZM1-234-010		FLY-WHL,ZZM-1
42	8Z-ZM1-267-010		SHAFT,CAPSTAN 2
43	8Z-ZM1-228-010		GEAR,SLIP T-UP B
44	8Z-ZM1-265-010		FELT,T-UP
45	8Z-ZM1-227-010		GEAR,SLIP T-UP A
46	8Z-ZM1-251-110		SPR-C,T-UP SLIP
47	8Z-ZM1-243-210		SPR-T,STOP/PAUSE
48	87-A91-532-010		MOT,MS15U2LW1A
49	8Z-ZM1-235-010		PULLEY,MOT
50	8Z-ZM2-216-010		BELT,MAIN M
51	8Z-ZM1-260-010		SPR-P,CASETTE
52	8Z-ZM2-201-010		CHAS ASSY,ZZM-2
53	8Z-ZM1-255-110		SPR-T,E-LOCK
54	8Z-ZM2-219-010		LEVER,E-OPEN ZZM-2
55	8Z-ZM1-214-110		LEVER,LOCK
56	8Z-ZM2-211-010		FLY-WHL,ZZM-2
57	8Z-ZM1-257-110		SPR-C,F/R
58	8Z-ZM2-210-010		LEVER,BRIDGE<YR2NF,YR3NF>
59	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
60	87-A91-494-010		SW,LEAF MSW17820<YR1NF,YR2NF>
61	8Z-ZM1-241-010		SPR-T,PLAY<YR1NF>
61	8Z-ZM2-217-010		SPR-T,PLAY 2<YR2NF,YR3NF>
62	8Z-ZM2-601-010		CONN ASSY,9P ZZM-2<YR1NF>
63	8Z-ZM1-275-010		W-L,1.47-4-0.25
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

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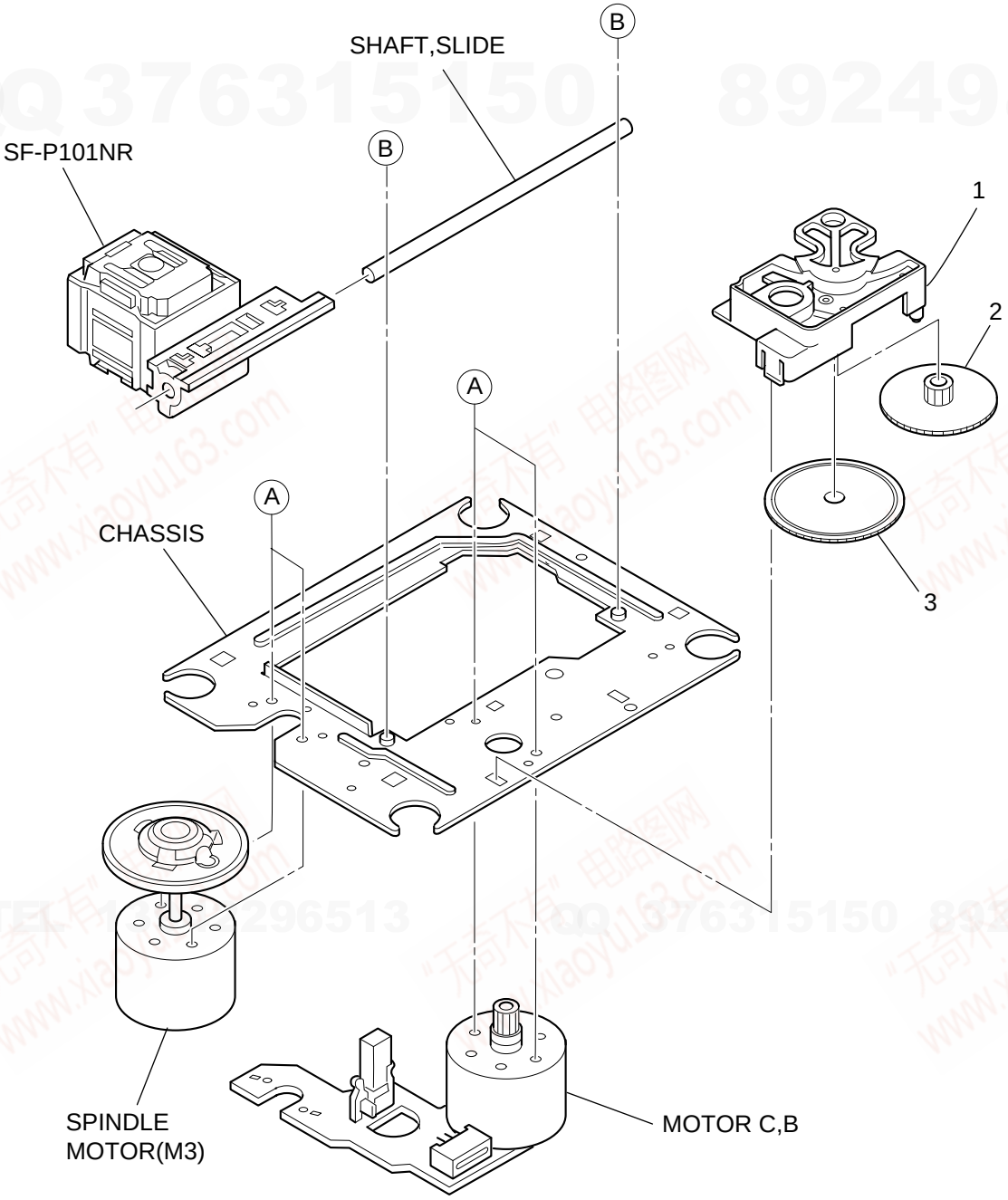
CD MECHANISM EXPLODED VIEW 1/1



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CD MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S2-121-A28-400		COVER GEAR
2	S2-511-A21-000		GEAR MIDDLE
3	S2-511-A21-100		GEAR,DRIVE
A	S1-PN2-03R-OSE		SCR PAN PCS 2-3
B	87-261-073-410		SCR S-TPG FLT 2.6-6
ALL	M8-ZZK-E90-070		DA11T3C

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AIWA CO.,LTD. 2–11, IKENOHATA 1–CHOME, TAITO-KU, TOKYO 110-8710, JAPAN TEL:03 (3827) 3111

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